

CLAIMS

What is claimed is:

1. A vehicle mobile radio holder (4, 7, 79) for mounting a mobile radio terminal (5) in a vehicle, with the vehicle mobile radio holder (4, 7, 79) having a housing (41, 71, 75) with a first housing part (76, 791) which is shaped to hold a mobile radio terminal (5) an electrical interface (43, 73) for connection of an external antenna (6) to the vehicle mobile radio holder (4, 7, 79), and a coupling antenna (1; 2, 3; 78) which is electrically connected to the interface, for non-contacting electromagnetic coupling of RF signals between the coupling antenna (1, 2; 3; 78) and the antenna of a mobile radio terminal (5) which is inserted into the vehicle mobile radio holder,
characterized in that the vehicle mobile radio holder (4, 7, 79) also has at least one element, (61, 62, 63, 64, 65, 77) for reflection to the coupling antenna of electromagnetic radiation which has been emitted from the antenna of the mobile radio terminal (5) inserted into the vehicle mobile radio holder and has not been injected into the coupling antenna (1, 2, 3, 78), and/or has at least one element (66, 67, 68, 69) for absorption of this electromagnetic radiation.
2. The vehicle mobile radio holder as claimed in claim 1, characterized in that the element (62, 64) is formed from a conductive layer arranged underneath the coupling antenna (1; 2, 3) when viewed from the inserted mobile radio terminal.
3. The vehicle mobile radio holder as claimed in claim 2, characterized in that the conductive layer completely covers at least the area covered by the coupling antenna (1; 2, 3).
4. The vehicle mobile radio holder as claimed in claim 2 or 3, characterized in that the conductive layer is aligned essentially at

right angles to the main emission direction of the antenna of the inserted mobile radio terminal.

5. The vehicle mobile radio holder as claimed in one of claims 1 to 4, characterized in that the element (61, 63, 65) is formed from a conductive layer arranged at the side of the coupling antenna (1; 2, 3).
6. The vehicle mobile radio holder as claimed in one of the preceding claims, characterized in that the housing (75) of the vehicle mobile radio holder has a second housing part (77), in that forms that face of the housing (75) of the vehicle mobile radio holder which faces away from the inserted mobile radio terminal (5), and in that the second housing part (77) is coated with an electrically conductive layer (772) or is composed of an electrically conductive plastic.
7. The vehicle mobile radio holder (79) as claimed in one of the preceding claims, characterized in that the housing of the vehicle mobile radio holder (79) has a third housing part (773), in that at least partially surrounds the inserted mobile radio terminal (5) together with the first housing part (791), and in that this third housing part (793) is coated with an electrically conductive layer, or is composed of an electrically conductive plastic.
8. The vehicle mobile radio holder as claimed in claim 7, characterized in that the third housing part (793) is detachably connected to the first housing part (791), in particular by means of a locking mechanism, by means of latching or by means of hinges is connected to the first housing part (791).
9. The vehicle mobile radio holder as claimed in one of the preceding claims, characterized in that the element is composed of a foam which absorbs electromagnetic radiation and is arranged underneath the coupling antenna and/or to the side of the coupling antenna, when seen from the inserted mobile radio terminal.

10. The vehicle mobile radio holder as claimed in one of the preceding claims, characterized in that the element (66, 67, 68, 69) is composed of one or more absorber structures (661 to 666, 671 to 676, 681 to 684, 691, 692) which absorb electromagnetic radiation and are arranged underneath the coupling antenna, or to the side of the coupling antenna, when seen from the inserted mobile radio terminal.
11. The vehicle mobile radio holder as claimed in claim 11, characterized in that the absorber structures are aligned essentially at right angles to the main emission direction of the antenna of the inserted mobile radio terminal.
12. The vehicle mobile radio holder as claimed in one of claims 10 or 11, characterized in that the housing of the vehicle mobile radio holder has a second housing part, in that forms that face of the housing of the vehicle mobile radio holder which faces away from the inserted mobile radio terminal, and in that this second housing part is provided at least in places with a layer composite which has absorber structures.
13. The vehicle mobile radio holder as claimed in one of the preceding claims, characterized in that the housing of the vehicle mobile radio holder has a third housing part, which at least partially surrounds the inserted mobile radio terminal together with the first housing part, and in that the third housing part is provided at least in places with a layer composite which has absorber structures.
14. The vehicle mobile radio holder as claimed in one of the preceding claims, characterized in that the coupling antenna (1; 2, 3) is aligned essentially at right angles to the main emission direction of the antenna of the inserted mobile radio terminal (5).
15. The vehicle mobile radio holder as claimed in one of the preceding claims, characterized in that the coupling antenna (1; 2, 3) has

conductors which are arranged essentially parallel to one another and are coupled to one another, with the two outer conductors being connected in order to form a loop which is not entirely closed and is composed of conductive material and surrounds the central conductor.

16. The vehicle mobile radio holder as claimed in one of claims 1 to 14, characterized in that the coupling antenna (2, 3) is in the form of a two-layer or multiple-layer coupling structure with two or more coupling structure elements (2, 3) arranged one above the other.